ers who previously kept no hogs on their farms now fatten from one to five or even more for home use. For many families home-canned beef was made available for the first time during the summer of 1931.

Meat Demonstrations Held in Cities

Interest in the meat program has not been confined to the farmers and ranchmen of the State. Meat demonstrations have been conducted also in towns and cities. Some were held to acquaint retailers with new cutting methods, others to furnish city housewives with



FIGURE 213.—Neatly wrapped and labeled meat prepared for sale by a group of farmers in the south plains of western Texas

information on selecting and buying both lamb and beef. A survey taken in four large towns in Texas during the spring of 1931 revealed that the consumption of lamb had increased as much as one-third after special lamb demonstrations had been given there.

Though the interest in meat demonstrations in cities is noteworthy.

the principal aim of the program in Texas has been to encourage a better-balanced meat supply for farm and ranch homes. In many instances pork had been utilized almost exclusively, and oftentimes the supply lasted only a few months. To encourage a more varied and adequate diet throughout the year, the present recommendations include beef and lamb as well as pork, and also other meats such as chicken and fish. The needs of a family of five adults appear to be well supplied by approximately two hogs weighing about 225 pounds each, one beef animal weighing about 550 pounds, and two lambs weighing approximately 85 pounds each.

ROY W. SNYDER, Bureau of Animal Industry.

COTTON IS UTILIZED AS NEW FOUNDATION MATERIAL FOR MAKING HOOKED RUGS

The program of the division of textiles and clothing of the Bureau of Home Economics includes projects that stress effective ways of using cotton and wool fabrics. In many cases the studies utilize materials already available and suggests ways of using them in the home to produce the best results. Whenever fabrics satisfactory for a particular purpose are not on the market, new ones are developed if a definite use for them is seen. An example of this is the recent development of an inexpensive cotton material for the foundation of hooked rugs.

Requests for such material were received from several Southern States where making rugs of this kind has become an established home industry. Until recently burlap has been used almost univer sally for such foundations but it has not been wholly satisfactory and there was a need for a more suitable fabric. The requests were prompted also

by a desire to find another use for a home-grown fiber. As a result, the Bureau of Agricultural Economics and the Bureau of Home Economics, working cooperatively, set up specifications for experimental fabrics, had them woven and then subjected them to scientific and practical tests.

Modifications were made in the original specifications until a satisfactory fabric was obtained. (Fig. 214.) It is 40 inches wide, the

same varn is used for both the warp and the filling, and has the same number of threads per inch fillingwise as warpwise. It has been sized lightly and then calendared to hold the fuzzy ends close to the varn and to make the material easier to use. The new fabric possesses all the desirable characteristics of the best quality burlap and in addition is as strong in the warp as in the filling varns.

Comparisons With Other Materials

In Table 13 the cotton material is compared with the various kinds of burlap ordinarily used. The cotton is almost identical in construction with the art burlap which is the grade found in many high-quality commercial rug patterns. The thread count, weight per square yard, and thickness are practi-

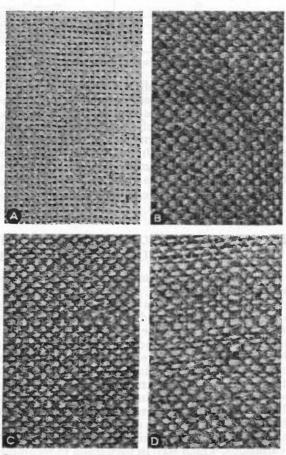


FIGURE 214.—A, Cotton material recently developed for use as foundation material for hooked rugs; B, art burlap, C, upholsterers' burlap; D, burlap bagging

cally the same, but the tensile strength of the two materials differs conserably. The cotton warp shows a strength of 126.4 pounds as compared with 85.6 pounds in the burlap; but the filling yarns of the burlap are stronger than those in the cotton. These figures indicate that the burlap is unevenly balanced and it seems logical to assume that the warp yarns would break sooner than the filling. This is always a serious defect in any fabric. Also the jute fiber in the burlap is known to deteriorate rapidly when exposed to moisture or sunlight, and under ordinary conditions of wear to become brittle and lose much of its strength, whereas cotton fabrics offer greater resistance to moisture and sun.

Table 13.—Comparison of a new cotton material with the various kinds of burlap ordinarily used for hooked-rug foundations

Fabric	Weave	Thread count per inch		Weight per	Tensile strength per inch ¹		Thick-
		Warp	Filling	square yard	Warp	Filling	ness
Eotton material	Plain do do	Number 14 12 13 12	Number 14 12 13 12	Ounces 13. 1 11. 5 8. 4 8. 4	Pounds 137 85. 6 105 69. 0	Pounds 133 176. 2 97. 5 56. 8	Inch 0.035 .026 .031 .036

¹ Strip samples 1 inch in width used for tensile strength tests.

Besides satisfying physical requirements, the new material meets certain practical demands made of any foundation fabric. It takes a design readily, remains taut in the frame during the hooking process and carries any type of filler that the rug maker wishes to use. The weave permits the yarns to slip apart easily to admit the needle and springs back to hold the loops in place. In order to judge the possibilities of the cotton material and the ease with which it could be handled, complete rugs were made using various kinds of fillers.

Bess M. Viemont, Bureau of Home Economics.

FOOD-QUALITY STUDIES ELICIT FACTS THAT SERVE AS GUIDE TO PRODUCERS

"Standards for consumers" and "consumers' information" are becoming familiar terms, and with good reason. It is desirable for the consumer to know what contributes to quality or what constitutes a standard for every product he is selecting. But standards can not be set up arbitrarily. The characteristics of any product, manufactured or grown, are determined largely by production conditions as well as by variety. For this reason, the best way to aid in the present effort to increase consumers' information is to help the producer find out how to develop quality characteristics in his product. This is the aim of several studies set up in the food utilization section of the Bureau of Home Economics. Many times an investigation of this kind must begin with an analysis of differences in certain properties that contribute to quality. This is a step toward finding out the reason for variations, which step in turn leads to recommendations for modifying certain characteristics. In the case of natural food products such as rice and potatoes the findings of such studies are of greatest concern to the producer because he must apply them for the benefit of the consumer.

Rice Varieties Differ in Cooking Qualities

Because of differences noted in the cooking qualities of rice, a study has been made of eight native-grown rices. These eight varieties comprise the major part of domestic rice now on the market for cooking purposes.

A preliminary study bore out the general observation that rices when cooked by the same method differ greatly in wholeness and stickiness of the grain. Tests then made showed that different rices required dif-